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Date: Oct 20/2011

Signature: 
Mark S. Starzomski, 62,441

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/593,053 Confirmation No. 7242

Applicant : Jianglei Ma, et al.

Filed : September 15, 2006

TC/A.U. : 2474

Examiner : Christopher P. Grey

Docket No. : 77682-555

Customer No. : 07380

Commissioner for Patents
Alexandria, VA 22313-1450
U.S.A.

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Expedited Handling Requested

Dear Sir:

Pre-Appeal Brief Request for Review

Applicant requests review of the final rejections issued in connection with the above-identified application on July 20, 2011. A Notice of Appeal has been submitted concurrently herewith.

35 U.S.C. § 102 Rejections

Controlling case law has frequently addressed rejections under 35 U.S.C. § 102. "For a prior art reference to anticipate in terms of 35 U.S.C. Section 102, every element of the claimed invention must be identically shown in a single reference." Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988; emphasis added). The disclosed elements must be arranged as in the claim under review. See Lindemann Machinefabrik v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). If any claim, element, or step is absent from the reference that is being relied upon, there is no anticipation. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 230

U.S.P.Q. 81 (Fed. Cir. 1986; emphasis added). The following analysis of the present rejections is respectfully offered with guidance from the foregoing controlling case law decisions.

The Examiner has rejected claims 1, 2, 4, 5, 20, 24 to 26, 46, 53 to 63 and 69 to 72 under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication No. 2003/0072254 to Ma et al. (hereinafter Ma et al '54).

Claim 1 includes the limitation that pilots are inserted “for at least one antenna in a grouping of at least one subcarrier of the plurality of sub-carriers for all OFDM symbols of the respective sequence of OFDM symbols”.

The Examiner has alleged that this limitation is disclosed at paragraph [0097] of Ma et al. '54 in the form of the disclosure of “In high mobility applications, pilots should be included in every OFDM symbol avoiding the need for this last interpolation in time step”.

Applicant submits that the limitation added in the present application defines that pilots are inserted “in a grouping of at least one sub-carrier … for all OFDM symbols” meaning that a minimum of at least one single sub-carrier is used for inserting pilots in all OFDM symbols, in addition to the limitation of blocks of pilots in the 2 sub-carrier by 2 OFDM symbol arrangements being scattered in time and frequency.

Applicant directs the Examiner’s attention to FIG. 6 as an example illustrating two particular limitations of claim 1. The limitation of pilots being inserted “for the four transmit antennas collectively in blocks of two sub-carriers by two OFDM symbols scattered in time and frequency” is illustrated as the groupings of four pilots in the 2 sub-carrier by 2 OFDM symbol arrangements scattered throughout the two dimensional time-frequency resource. The limitation of pilots being inserted “for at least one antenna in a grouping of at least one subcarrier of the plurality of sub-carriers for all OFDM symbols of the respective sequence of OFDM symbols” is illustrated as two different groupings of pilots on two different sub-carriers (reference characters 166 and 168), in which pilots are inserted on all OFDM symbols of the respective sub-carriers.

The disclosure in paragraph [0097] alleged by the Examiner to disclose the limitation “for at least one antenna in a grouping of at least one subcarrier of the plurality of sub-carriers for all

OFDM symbols of the respective sequence of OFDM symbols” does not disclose or suggest whether pilots are inserted in a single sub-carrier over all OFDM symbols or whether pilots are inserted in a random selection of sub-carriers in an appropriate band of sub-carriers, not all in a single sub-carrier, but such that there is a pilot in each OFDM symbol.

For at least the reasons discussed above, Applicant submits that Ma et al. '54 does not identically disclose all the elements of claim 1, and as this is the case, Ma et al. cannot be considered to anticipate claim 1.

Claims 2, 4, 5, 20, 24 to 26, 46, 53 to 57, 59 to 61 and 69 to 72 are dependent upon claim 1, either directly or indirectly. For at least their dependence upon claim 1 Applicant submits that claims 2, 4, 5, 20, 24 to 26, 46, 53 to 57, 59 to 61 and 69 to 72 are novel over Ma et al '54.

Applicant respectfully requests that the Examiner reconsider and withdraw the 35 U.S.C 102(e) rejection of claims 1, 2, 4, 5, 20, 24 to 26, 46, 53 to 57, 59 to 61 and 69 to 72.

35 U.S.C. 103 Rejections

Applicant's analysis below demonstrates that the Examiner's obviousness rejection under 35 U.S.C. 103(a) fails as a result of the statutory exception set forth in 35 U.S.C. 103(c)(1).

The Examiner has rejected claims 47, 64, 66 to 68 and 73 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ma et al. '54 in view of US Patent Application Publication No. 2003/0072255 to Ma et al. (hereinafter Ma et al '55). Applicant notes that in his anticipation rejection of claims 1, 2, 4, 5, 20, 24 to 26, 46, 53 to 63 and 69 to 72, discussed above, the Examiner (at least impliedly) identified the Ma et al. '54 reference as being a prior art reference under 35 U.S.C. 102(e). In fact, both of the Ma et al. references have a publication date of April 17, 2003, and a filing date of January 8, 2002, and therefore both of the Ma et al. references only qualify as prior art references under 35 U.S.C. 102(e).

Significantly, 35 U.S.C. 103(c)(1) provides:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Applicant submits that the present application (U.S. Patent Application No. 10/593,053) and both of the Ma et al. references were, at the time the invention of the present application was made, owned by Nortel Networks Limited. This fact, in combination with the fact that both of the Ma et al. references only qualify as prior art references under 35 U.S.C. 102(e), are sufficient to disqualify the Ma et al. references from being used in a rejection under 35 U.S.C. 103(a) (See MPEP 706.02(l)(2)).

In support of the above, Applicant also provides the following assignment particulars regarding the present application and the Ma et al. references. The assignment pertaining to Ma et al '54 (2003/0072254) was recorded at Reel/Frame: 012763/0796 on April 5, 2002. The assignment pertaining to Ma et al. '55 (2003/0072255) was recorded at Reel/Frame: 012773/0956 on April 5, 2002. The assignment for the present application was recorded at Reel/Frame: 018328/0178 on September 29, 2006.

For at least the reasons discussed above, Applicant submits that the Examiner's obviousness rejection of claims 47, 64, 66 to 68 and 73 has failed because neither of the Ma et al. references are citable prior art.

Response to Examiner Comments in Final Office Action

On page 2 of the Final Office Action the Examiner responds to Applicant's arguments pertaining to the 35 U.S.C. 102(e) rejection from the previous response filed on April 27, 2011. The Examiner alleges that the response was not sufficient because the arguments "amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references". Applicant

submits the arguments provided above sufficiently describe why the claims are novel over the cited reference.

Also on page 2, the Examiner alleges that the Applicant's arguments pertaining to the 35 U.S.C. 103 rejection are based on the 35 U.S.C. 102 rejection arguments and are therefore, not likewise sufficient to address the 35 U.S.C. 103 rejection. Applicant respectfully submits that the 35 U.S.C. 103 rejection arguments are not based on the arguments related to the 35 U.S.C. 102 rejection. The 35 U.S.C. 103 rejection arguments are directed to the statutory citability of the reference, not the subject matter of the cited reference *per se*.

Conclusion

Based upon the above arguments, Applicant has established that at least one claimed element is not identically disclosed by the cited reference in the 35 U.S.C. 102(e) rejection, and as such the Examiner has erred in raising the rejection. Furthermore, Applicant submits that the cited references are not citable under the guidelines of 35 U.S.C. 103(c)(1), and as such the Examiner has erred in raising the 35 U.S.C. 103(a) rejection.

It is respectfully requested that the Review Panel overturn the Examiner's rejection of claims 1, 2, 4, 5, 20, 24 to 26, 46, 53 to 63 and 69 to 72 under 35 U.S.C. 102(e) and claims 47, 64, 66 to 68 and 73 under 35 U.S.C. 103(a).

Respectfully submitted,

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